

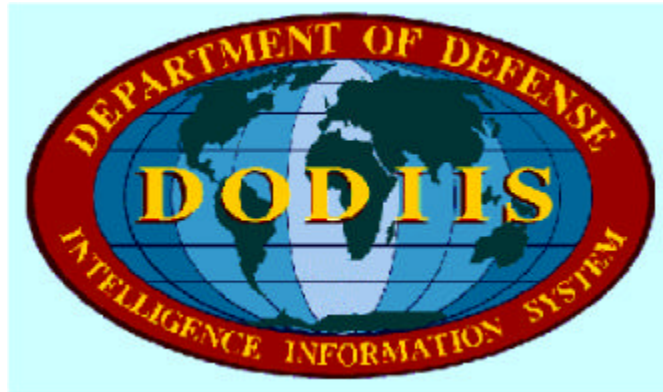
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## VIRTUAL TEST FOLDER

March 9, 1999

Internet <http://www.if.afrl.af.mil/programs/jitf/>

INTELINK <http://web1.rome.ic.gov/jitf/vtf.html>

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# **VIRTUAL TEST FOLDER**

## **1. INTRODUCTION**

### **1.1 BACKGROUND**

In September 1996, the Test Process Oversight Committee (TPOC) recommended that "an electronic virtual folder be implemented on INTELINK that would contain all the test process information." TPOC Action Item #19 tasked the Joint Integration Test Facility (JITF) and 497th IG/INDS to "design and build a Virtual Test Folder (VTF) for test process information and comments", in support of the Department of Defense Intelligence Information System (DODIIS) Intelligence Mission Application (IMA) Certification Process.

### **1.2 OBJECTIVE**

The objectives in instituting the VTF were to:

- make accessible to decision makers (i.e., DODIIS Management Board (DMB)) and IMA users, all test process information from one location.
- provide the community of IMA users a forum for recording their comments, recommendations, problems, etc., to be available to the DMB, DODIIS EXecutive Agents (DexAs), Program Management Offices (PMOs), Developers and the Testing Agencies.
- make available to the DEXA for Test and Evaluation (T&E), a repository of test data to use in preparation of statistics measuring the success of the testing program and for identification of process improvement areas.

### **1.3 ROLE OF VTF**

In addition to being a tool to meet the above objectives, the VTF supports the data input and feedback mechanism for test plans and test process information as defined in the DoDIIS Test & Evaluation Master Plan (TEMP) and the DoDIIS Test and Evaluation Policy Document. The DoDIIS IMA Certification Process is designed to present needed information and effectively manage user input to enhance the DMB decision making process and to strengthen risk migration for the sites. The DMB needs user input to better adjudicate deployment decisions. Users need to provide input to ensure better test scenarios are developed, especially for interoperability. The information flow, as shown in Figure 1, shows the process and the links to the VTF.

## VTF in the DoDIIS IMA CERTIFICATION PROCESS

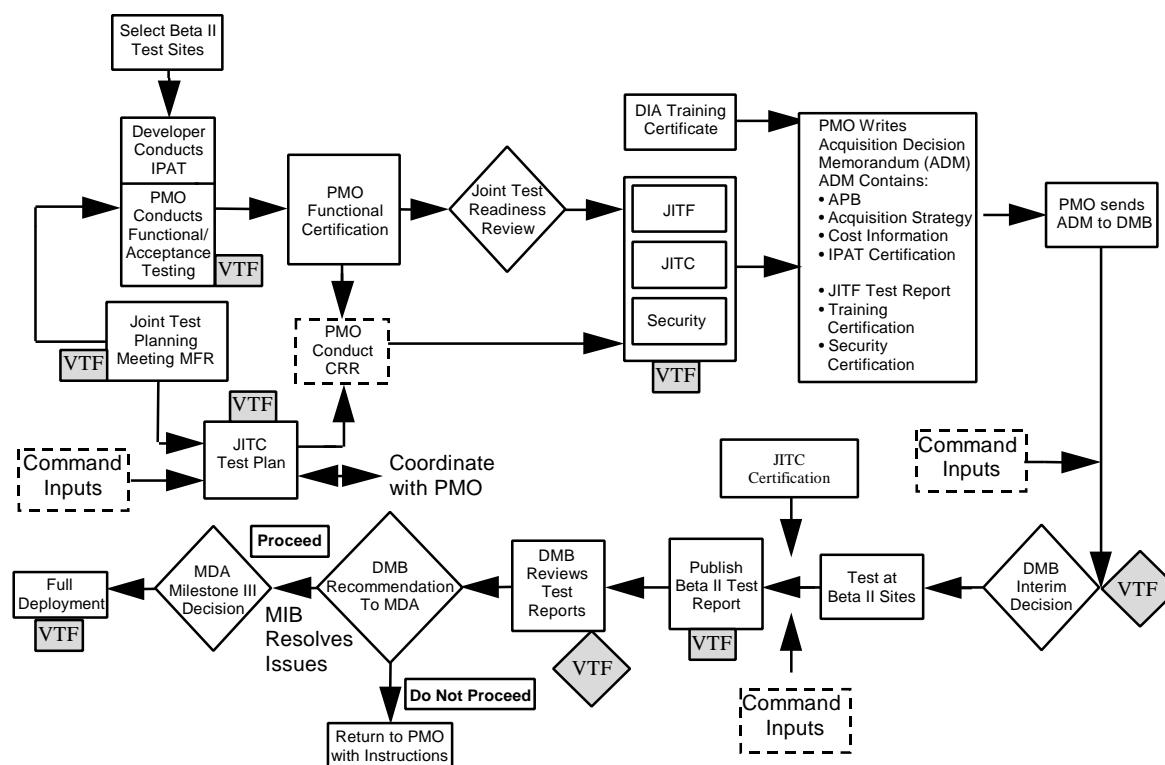


Figure 1 - VTF in the DoDIIS IMA Certification Process

## 2. CONTENT OF VIRTUAL TEST FOLDER (VTF)

The availability of Test Reports and testing related data on both the Internet and INTELINK is designed to facilitate widest dissemination and accessibility of the data consistent with the security aspects of the data. Consequently, some data is available only through the INTELINK. The VTF provides, in addition to IMA Test Reports

- Test Process, Guidance and Policy Documents produced by the Testing Agencies.
- Memos For Record (MFR) (minutes) of Joint Test Planning Meetings (JTPMs) and TPOCs.
- TPOC Action Items and resolution status.
- Results of PMO In-plant Acceptance Tests (IPAT).
- Other test related activities.

The VTF is administered by the JITF under oversight of the DExA for T&E. It is the responsibility of the JITF to make available to the DoDIIS community on line, all documents, reports and other items within seven workdays of the date received by the Web Site.

### 3. POLICY AND IMPLEMENTATION.

#### 3.1 POLICY

Organizations and Agencies involved in the DoDIIS IMA Certification Process will create test plans, results, memos, and reports and post these items on their respective INTELINK web pages; and link them to the VTF. See Figure 2. Instructions on linking and use are contained in this section and on the VTF home page.

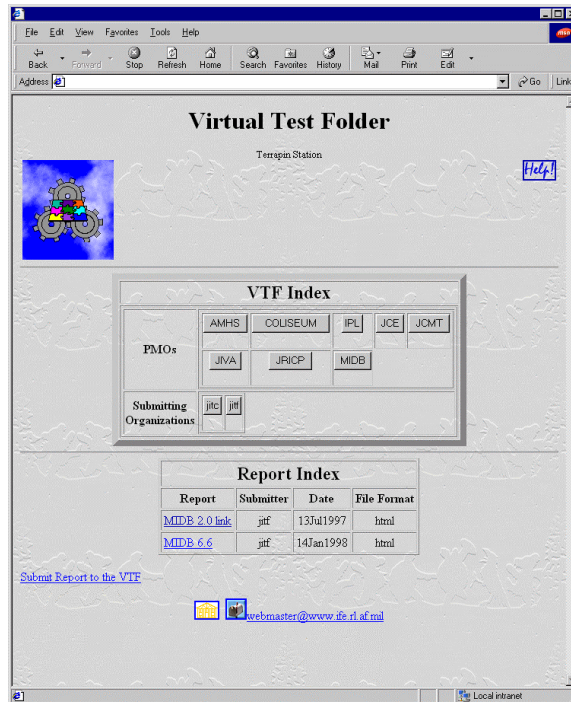


Figure 2 - Virtual Test Folder - Initial Page

Note: The first entry in the 'Report Index' is a link to a remote site.

#### 3.2 IMPLEMENTATION

The following products, produced in support of the testing process, are key portions of the information needed to analyze and support the T&E process. Organizations producing these products are required to make the information available for linking and posting to the VTF. Minimum required items to be posted to the VTF include:

- The DExA for T&E shall publish the results of the JTPM and forward it to the JITF for posting to the VTF and distribute it by FAX or e-mail to attendees of record.
- The Joint Interoperability Test Center (JITC) and the Security Agencies shall post their Test Plans to the VTF.
- The Test Agencies (JITC and JITF) shall post or link their test reports to the VTF.

Additional items that are desired for the VTF include:

- The PMO shall publish and post results of the functional/acceptance testing to include the PMO functional certification memo.
- The Training Certifiers shall post the results of their review of the application's training program.
- The BETA II test site, in addition to releasing a test report message, shall publish and post or link the test message to the VTF.
- The Security Certifiers (Defense Intelligence Agency (DIA), Army, Navy, Air Force, and National Imagery and Mapping Agency (NIMA)) shall post or link their findings reports to the INTELINK VTF.

## 4. VTF PROCESS

### 4.1 VTF SUBSCRIPTION

PMOs/Users can subscribe/unsubscribe to the VTF by use of the VTF Subscription Page. PMOs/Users may access this page at the INTELINK Uniform Resource Locator (URL) displayed on the title page for this document. Upon registering, subscribers are then automatically notified whenever information is upgraded or new information is added to the VTF.

### 4.2 POST & LINK

A Test Organization or Agency publishes a document and posts it on its web site. Then by using the VTF Submittal Page (see Figure 3), they can enter the appropriate information resulting in the creation of a link on the VTF to the file on their web site.

The screenshot shows a Netscape browser window titled "VTF". The address bar is empty. The main content area is titled "Virtual Test Folder" with a "Trough Status" label and a "Help!" link. Below this is a form for submitting information. The form includes the following fields and controls:

- "Select PMO" dropdown menu with a text input field and the instruction "or enter new one here (this will override drop-down list)".
- "Select Submitting Organization" dropdown menu with a text input field and the instruction "or enter new one here (this will override dropdown list)".
- "Version Number" text input field with a hint "e.g.: 3.2".
- "Date" text input field with the value "09Apr1999".
- "Select Report Format" dropdown menu with a text input field and the instruction "e.g.: http://www.fie.rl.af.mil/Folder/filename.html".
- "Enter protocol, web server, and document name" text input field with a hint "e.g.: http://www.fie.rl.af.mil/Folder/filename.html".
- "Submit" and "Reset" buttons.
- A "Go To The VTF" link at the bottom.
- Contact information: "webmaster@www.fie.rl.af.mil" with an email icon.

The status bar at the bottom shows "Done" and "Local intranet".

Figure 3 - Virtual Test Folder Submittal Page

### 4.3 NOTIFICATION OF NEW DATA

An automatic e-mail notification is then sent to the registered users of the VTF. The users link to the VTF and are in turn linked to the posted information.

### 4.4 USER COMMENTS

The users accessing posted information can review and comment on it. An automated comment submittal form is the part of the VTF used to register comments on Test Reports and on other posted information. Users' comments should concentrate on interfaces, test configurations, technical issues, and other test requirements related to the test process for a particular DoDIIS IMA. Separate forms should be used for each IMA.

### 4.5 RESPONSE TO USER COMMENTS

VTF comment forms are delivered to the Configuration Management (CM) function at the Air Force Research Lab (AFRL) Rome Research Site (RRS). The CM function will forward them to the appropriate PMO or other responsible organization for action. The receiving organization will take appropriate action and complete the cycle by completing the disposition section of the form and returning it to CM. The DExA for T&E will be informed of unresolved or disputed issues and assist in resolving them or if necessary, forward them to the DMB for resolution.

### 4.6 VTF ARCHITECTURE

The VTF architecture is shown in Figure 4.

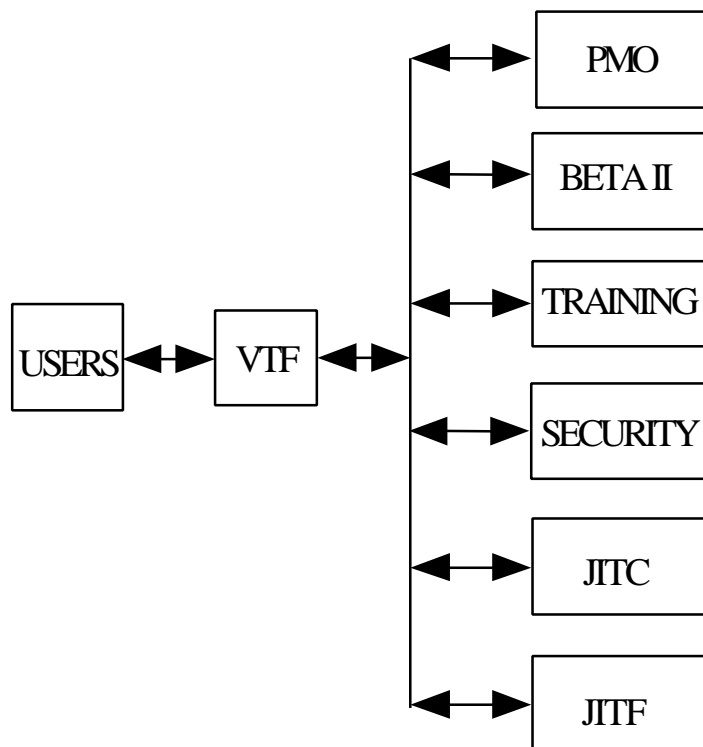


Figure 4 - The VTF Architecture

## **5. VTF PARTICIPANTS.**

The following responsibilities have been established as a minimal set of requirements for each of the participants. As the VTF matures, these requirements may change.

### **A. DMB:**

- The DMB will have access to the VTF for detailed information as required.

### **B. TPOC Chairperson/DoDIIS DExA for T&E:**

- Coordinates test community information requirements, monitors comments, and advises the DMB and user community as necessary.
- Publishes the JTPM MFR.
- Advises the DMB of critical user concerns as input to the DMB's Interim Decision and recommendation to Milestone Decision Authority (MDA) for Certificate to Field.

### **C. VTF Administrator:**

- Establishes and maintains the web site.
- Develops and maintains the automated e-mail notification system.
- Develops and maintains necessary forms/templates for user reporting of comments.
- Posts products and monitors/establishes links to reports.
- Posts general information.
- Monitor user inputs on materials contained in the VTF.

D. Users: The user is an integral part of the test team and is encouraged to participate in test events and to review test results as published in the various test reports in the VTF that presents the agency's recommendation on IMA certifications.

- Monitor and review VTF contents and submit comments as necessary.
- Users have multiple options in forwarding requirements for testing including:
- Participation in the TPOC.
- Discussions with both the IMA PMOs and the DMB for specific program and community requirements.
- Direct communications with the test agencies.

### **E. Testing organizations:**

- Establish and maintain their web pages and link plans and reports to the VTF.
- Post data according to established standards.



- All web products should use standard products such as Netscape or Mosaic to ensure the most participation through viewable pages and the ability to download native product files.
- All images must comply with either GIF or JPEG file format.
- VTF documents should be in web standard format (e.g., HTML, PDF, etc).
- JITF: The JITF has published the DoDIIS Integration Requirements and Evaluation Procedures, Version 2.0. This plan applies to all IMAs and will be accessible through the VTF.
  - The test reports will include a complete set of findings, open issues, software problem reports, and documentation errors. Ten days after the completion of testing, the JITF final test report will be published and linked to the VTF on INTELINK where it will become available for general review and comment.
  - An automated e-mail notification system will be used to notify the testing community when and where the process information is available for review. Upon notification, the users can log on to the VTF home page and be linked to and review the test report.
- JITC: The test plans and reports will include a complete set of findings and open issues for established interfaces.
  - The JITC system test plan will be available on the JITC Homepage no later than the Joint Readiness Review (JRR) (two weeks prior to JITF testing) and will be linked to the VTF.
  - The JITC final test reports will be published and linked to the VTF on INTELINK, where it will become available for general review and comment.
  - An automated e-mail notification system will be used to notify the testing community when and where the process information is available for review.
  - Upon notification, the users can log on to the VTF home page and be linked to and review the test report.
- Information Security (INFOSEC): INFOSEC testing is the responsibility of DIA, NIMA and the Service Security Certifiers (Army, Navy, and Air Force).
  - DIA: INFOSEC Test Reports will be available for review on the VTF (TBD).
  - Air Force: INFOSEC Test Reports are available for review on the VTF.
  - Army: INFOSEC Test Reports will be available for review on the VTF (TBD).
  - Navy: INFOSEC Test Reports will be available for review on the VTF (TBD).
  - NIMA: INFOSEC Test Reports will be available for review on the VTF (TBD).
  - INFOSEC testing issues will be documented, tracked, and provided to PMO for discussion and to the certification authority for validation.

F. Training: (TBD). The PMO provides system training plans, documentation, and personnel required to support the operational deployment. DIA and NIMA are tasked to evaluate and certify that these resources provide adequate training to meet user requirements. While not a part of the formal testing, results can be posted/linked as part of the VTF.

G. AFRL CM. The CM function will support the VTF by processing the comments forms as necessary. CM will also maintain historical records.

## **6. VTF VALUE**

The most important value of the VTF is that all published data is immediately available to both decision makers and IMA users. The VTF also establishes standards that will facilitate the use of documents, products, and web sites. The VTF will also provide reusable products templates and populated products. It will promote routine publishing methodologies to streamline the review process.

## 7. ACRONYMS

ACRONYM	DEFINITION
AFRL RRS	Air Force Research Lab Rome Research Site
CM	Configuration Management
DEXA	DODIIS Executive Agent
DIA	Defense Intelligence Agency
DMB	DODIIS Management Board
DODIIS	Department of Defense Intelligence Information System
IMA	Intelligence Mission Application
INFOSEC	Information Security
IPAT	Implant Acceptance Testing
JITC	Joint Interoperability Test Command
JITF	Joint Integration Test Facility
JRR	Joint Readiness Review
JTPM	Joint Test Planning Meeting
MDA	Milestone Decision Authority
MFR	Memo For Record
NIMA	National Imagery and Mapping Agency
PMO	Program Management Office
T&E	Test and Evaluation
TBD	To Be Determined
TEMP	Test and Evaluation Master Plan
TPOC	Test Process Oversight Committee
URL	Uniform Resource Locator
VTF	Virtual Test Folder